

IN THE ABSTRACT

An embodiment of the The invention relates to the management of cummunications in a communication network ~~(100)~~ comprising at least one transmitting device ~~(101)~~ and at least one terminal ~~(102)~~ which is adapted to receive data. The inventive management method comprises the following steps: establishment ~~(304, 309, 312)~~ of a communication between one of the terminals, called the destination terminal, and one of the transmitting devices, called the transmitting device, using a first communication mode which is based on a single-carrier modulation; and passing to a second communication mode ~~(307, 310)~~ using a multicarrier modulation ~~(OFDM)~~, with a communication channel that uses the multicarrier modulation being assigned to the communication between the transmitting device and the destination terminal. According to the inventions, said first and second communication modes are carried out successively in an alternating manner. The invention also relates to the corresponding signal, transmitting device and destination terminal.